

**Property Comparison for Two Products from Extruded Rods
and Injection Molded Specimens**

Material: KT-820 NT	Extruded [1 in. Dia Rod]	Injection Molded [Same Lot]	Injection Molded [Data Sheet]
Tensile Yield Strength (psi)	15400	14300	13800
Tensile Elongation at Yield (%)	5.2	5.6	5.2
Tensile Elongation at Break (%)	21	21	25
Tensile Modulus (kpsi)	567	534	510
Flex Strength (psi)	22700	22200	21200
Flex Modulus (kpsi)	574	550	540
Compressive Strength (psi)	19000	16400	17600
Compressive Modulus (ksi)	484	650	601
Notched Izod (ft-lb/in)	1.3	1.6	1.7
Unnotched Izod (ft-lb/in)	No Break	No Break	No Break

Material: KT-820 CF30	Extruded [1 in. Dia Rod]	Injection Molded [Same Lot]	Injection Molded [Data Sheet]
Tensile Strength (psi)	17600	31300	29100
Tensile Elongation at Break (%)	5.2	1.9	2.0
Tensile Modulus (kpsi)	1010	3100	2860
Flex Strength (psi)	31600	47500	46000
Flex Modulus (kpsi)	1030	2640	2540
Compressive Strength (psi)	25700	23700	24500
Compressive Modulus (ksi)	729	1860	1950
Notched Izod (ft-lb/in)	1.5	1.5	1.3
Unnotched Izod (ft-lb/in)	11	13	14

Test Methods

Tensile: ASTM D638, using Type I, 0.125 in thick specimens

Flexural: ASTM D790

Compressive: ASTM D695, using 2 in. long specimens

Notched Izod: ASTM D256

Unnotched Izod: ASTM D4812

ASTM specimens were either injection molded or machined out of the center of the 1 in. diameter rods supplied by Drake Research Ltd. The middle data column contains the mechanical property test results on the same lot that was extruded, while the right hand data column is from our standard data sheets for these products, which also use injection molded specimens. The PEEK data in the middle column were on specimens that were annealed at 200 °C for 2 hr, while the data sheet property data in the right hand column are on as-molded specimens for all materials.

For inquires or additional information, please call: 1 (281) 255-6855